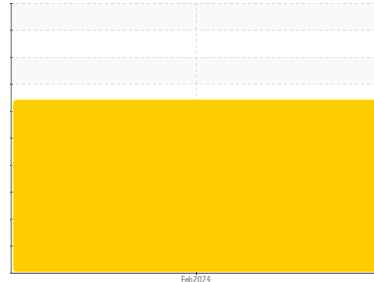
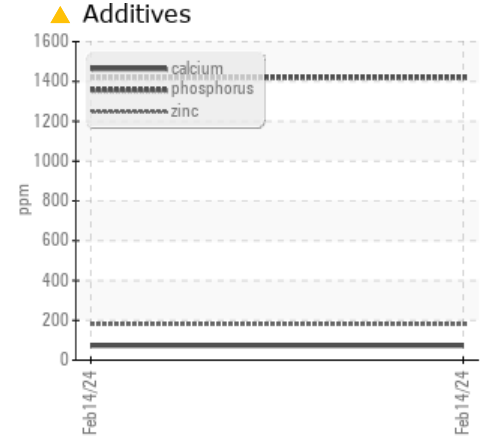
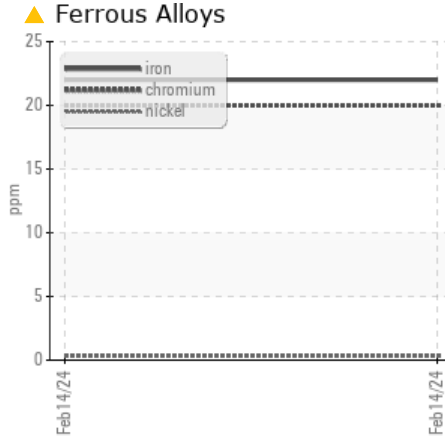
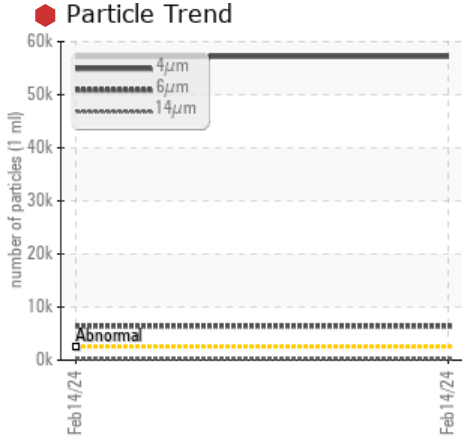




Machine Id
CATERPILLAR 349E 71
Component
Hydraulic System
Fluid
PANOLIN HLP SYNTH 46 (--- GAL)



COMPONENT CONDITION SUMMARY



RECOMMENDATION

Nous vous recommandons de vérifier tous les endroits par lesquels des contaminants peuvent pénétrer dans le système. Nous vous recommandons de remplacer le filtre et d'utiliser un système de filtrage hors-ligne afin d'améliorer la propreté du fluide. Le reniflard d'air doit être réparé. S'il n'est pas classé, nous vous recommandons de le remplacer par un reniflard à air adapté au micron et / ou au dessiccant. Si évalué, nous vous recommandons de réparer / remplacer le reniflard. Confirmez la source du lubrifiant utilisé pour l'appoint/remplissage. Échantillonner de nouveau dans 30 à 45 jours afin de contrôler la situation. À NOTER: S.V.P. inclure, avec le prochain échantillon, des détails de la capacité du réservoir et le type et le degré de filtration.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	---	---
Chromium	ppm	ASTM D5185(m)	>10	▲ 20	---	---
Particles >4µm		ASTM D7647	>2500	● 57189	---	---
Particles >6µm		ASTM D7647	>640	● 6413	---	---
Particles >14µm		ASTM D7647	>80	▲ 259	---	---
Particles >21µm		ASTM D7647	>20	▲ 57	---	---
Oil Cleanliness		ISO 4406 (c)	>18/16/13	● 23/20/15	---	---

Customer Id: CONSTM
Sample No.: PC0070364
Lab Number: 02617638
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
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gloria.gonzalez@wearcheck.com

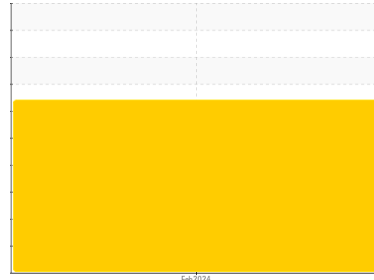
RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.
Resample	---	---	?	Resample in 30-45 days to monitor this situation.
Information Required	---	---	?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.
Check Breathers	---	---	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Dirt Access	---	---	?	We advise that you check all areas where contaminants can enter the system.
Check Fluid Source	---	---	?	Confirm the source of the lubricant being utilized for top-up/fill.
Filter Fluid	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

HISTORICAL DIAGNOSIS



Machine Id
CATERPILLAR 349E 71
Component
Hydraulic System
Fluid
PANOLIN HLP SYNTH 46 (--- GAL)



DIAGNOSIS

Recommendation

Nous vous recommandons de vérifier tous les endroits par lesquels des contaminants peuvent pénétrer dans le système. Nous vous recommandons de remplacer le filtre et d'utiliser un système de filtrage hors-ligne afin d'améliorer la propreté du fluide. Le reniflard d'air doit être réparé. S'il n'est pas classé, nous vous recommandons de le remplacer par un reniflard à air adapté au micron et / ou au dessiccant. Si évalué, nous vous recommandons de réparer / remplacer le reniflard. Confirmez la source du lubrifiant utilisé pour l'appoint/remplissage. Échantillonner de nouveau dans 30 à 45 jours afin de contrôler la situation. À NOTER: S.V.P. inclure, avec le prochain échantillon, des détails de la capacité du réservoir et le type et le degré de filtration.

Wear

Usure de segment.

Contamination

Il y a une quantité élevée de matières particulaires (2 à 100 µm de taille) présente dans l'huile. Le code de propreté du système est beaucoup plus haut que la limite acceptable pour votre objectif de propreté ISO 4406.

Fluid Condition

Les niveaux d'additifs indiquent l'ajout d'une autre marque ou d'un autre type d'huile. Le AN est acceptable pour ce fluide. L'huile n'est plus en état de service en raison d'une usure anormale et/ou sévère.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PC0070364	---	---
Sample Date	Client Info		14 Feb 2024	---	---
Machine Age	hrs	Client Info	12463	---	---
Oil Age	hrs	Client Info	3363	---	---
Oil Changed	Client Info		Not Chngd	---	---
Sample Status			SEVERE	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.05	NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		0	---	---
Iron	ppm	ASTM D5185(m) >20	22	---	---
Chromium	ppm	ASTM D5185(m) >10	▲ 20	---	---
Nickel	ppm	ASTM D5185(m) >10	<1	---	---
Titanium	ppm	ASTM D5185(m)	0	---	---
Silver	ppm	ASTM D5185(m)	0	---	---
Aluminum	ppm	ASTM D5185(m) >10	1	---	---
Lead	ppm	ASTM D5185(m) >10	<1	---	---
Copper	ppm	ASTM D5185(m) >75	5	---	---
Tin	ppm	ASTM D5185(m) >10	0	---	---
Antimony	ppm	ASTM D5185(m)	0	---	---
Vanadium	ppm	ASTM D5185(m)	0	---	---
Beryllium	ppm	ASTM D5185(m)	0	---	---
Cadmium	ppm	ASTM D5185(m)	0	---	---

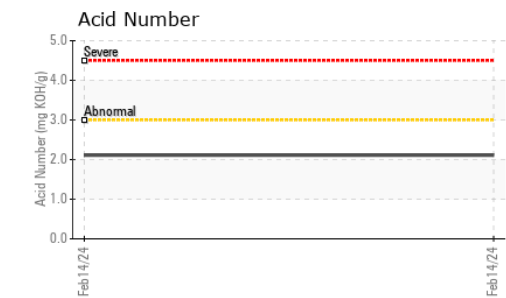
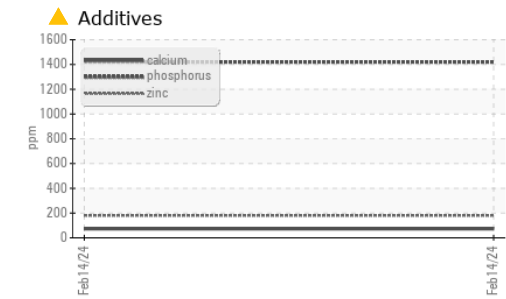
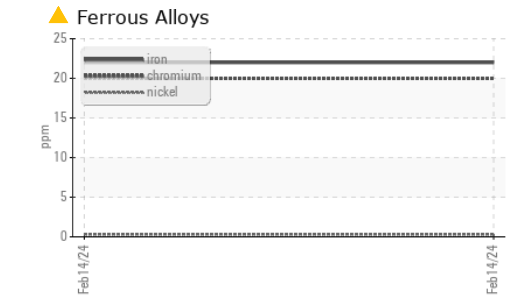
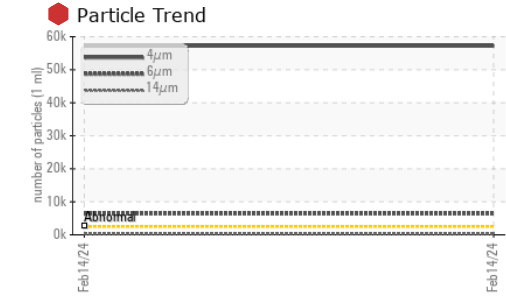
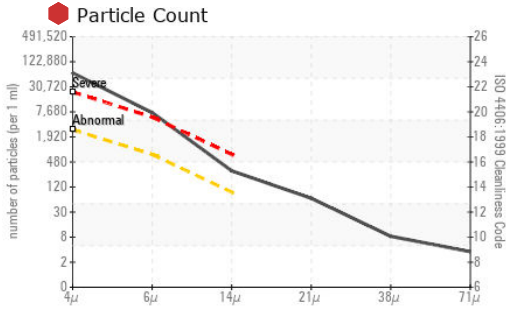
ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	1	---	---
Barium	ppm	ASTM D5185(m) 0	0	---	---
Molybdenum	ppm	ASTM D5185(m) 0	0	---	---
Manganese	ppm	ASTM D5185(m) 0	0	---	---
Magnesium	ppm	ASTM D5185(m) 0	6	---	---
Calcium	ppm	ASTM D5185(m) 0	▲ 73	---	---
Phosphorus	ppm	ASTM D5185(m) 1700	1420	---	---
Zinc	ppm	ASTM D5185(m) 0	▲ 180	---	---
Sulfur	ppm	ASTM D5185(m) 1350	1510	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >20	2	---	---
Sodium	ppm	ASTM D5185(m)	3	---	---
Potassium	ppm	ASTM D5185(m) >20	2	---	---

OIL ANALYSIS REPORT



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0070364
Lab Number : 02617638
Unique Number : 5734748
Test Package : IND 2 (Additional Tests: KV100, PQ, TAN Man, VI)

CONSTRUCTION ET PAVAGE PORTNEUF INC
 599 BOUL DUSSAULT
 ST-MARC-DES-CARRIERES, QC
 CA G0A 4B0
 Contact: S Lefebvre
 s.lefebvre@coppinc.ca
 T: (418)284-3939
 F:

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	57189	---	---
Particles >6µm	ASTM D7647	>640	6413	---	---
Particles >14µm	ASTM D7647	>80	259	---	---
Particles >21µm	ASTM D7647	>20	57	---	---
Particles >38µm	ASTM D7647	>4	7	---	---
Particles >71µm	ASTM D7647	>3	3	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	23/20/15	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	2.11	---	---

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	---	---
Precipitate	scalar	Visual*	NONE	---	---
Silt	scalar	Visual*	NONE	---	---
Debris	scalar	Visual*	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	---	---
Appearance	scalar	Visual*	NORML	---	---
Odor	scalar	Visual*	NORML	---	---
Emulsified Water	scalar	Visual*	>0.05	NEG	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	47.0	45.4	---
Visc @ 100°C	cSt	ASTM D7279(m)	8.1	8.2	---
Viscosity Index (VI)	Scale	ASTM D2270*	146	156	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image